

We claim:-

1. An antifoam and/or deaerater based on an oil-in-water dispersion which contains, in the dispersed hydrophobic phase, at least one compound effective as an antifoam and/or deaerater and, if required, further components, wherein the hydrophobic phase contains 3-thiaalkan-1-ols, 3-thiaoxoalkan-1-ols, 3-thiadioxoalkan-1-ols, esters of said compounds or mixtures thereof as compounds having an antifoam and/or deaerating effect.
2. An antifoam and/or deaerater as claimed in claim 1, wherein the hydrophobic phase contains
  - (a) 3-thiaalkan-1-ols, 3-thiaoxoalkan-1-ols, 3-thiadioxoalkan-1-ols, esters of said compounds or mixtures thereof and
  - (b) at least one compound from the group consisting of the glyceryl esters of fatty acids having at least 10 carbon atoms in the molecule, C<sub>12</sub>- to C<sub>30</sub>-alcohols, alkoxylated alcohols, esters of sugar alcohols having at least 4 OH groups or at least 2 OH groups and at least one intramolecular ether bond and of a fatty acid having at least 20 carbon atoms in the molecule, fatty esters of C<sub>12</sub>- to C<sub>22</sub>-carboxylic acids with monohydric to trihydric alcohols, ketones having melting points above 45°C, the polyglyceryl esters which are obtainable by at least 20% esterification of polyglyceryl esters which have at least 2 glycerol units with at least one C<sub>12</sub>- to C<sub>36</sub> fatty acid, reaction products of mono- and diglycerides with dicarboxylic acids, reaction products of glycerol with dicarboxylic acids, which reaction products are esterified with at least one C<sub>12</sub>- to C<sub>36</sub>-fatty acid, polyethylene waxes, natural waxes, hydrocarbons having boiling points above 200°C, finely divided inert solids and mixtures of said compounds.
3. An antifoam and/or deaerater as claimed in claim 1 or 2, wherein the hydrophobic phase contains
  - (a) 3-thiaalkan-1-ols, 3-thiaoxoalkan-1-ols, 3-thiadioxoalkan-1-ols, carboxylic esters of said compounds or mixtures thereof,

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(b1) polyglyceryl esters which are obtainable by at least 20% esterification of polyglycerols which have at least 2 glycerol units with at least one C<sub>12</sub>- to C<sub>36</sub>-fatty acid and

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(b2) glyceryl esters of fatty acids having at least 10 carbon atoms in the molecule, C<sub>12</sub>- to C<sub>30</sub>-alcohols, alkoxyated alcohols, esters of sugar alcohols having at least 4 OH groups or at least 2 OH groups and at least one intramolecular ether bond and of a fatty acid having at least 20 carbon atoms in the molecule, fatty esters of C<sub>12</sub>- to C<sub>22</sub>-carboxylic acids with monohydric to trihydric alcohols, ketones having melting points above 45°C, reaction products of mono- and diglycerides with dicarboxylic acids, reaction products of glycerol with dicarboxylic acids, which reaction products are esterified with at least one C<sub>12</sub>- to C<sub>36</sub>-fatty acid, polyethylene waxes, natural waxes, hydrocarbons having boiling points above 200°C, finely divided inert solids and mixtures of said compounds.

4. An antifoam and/or deaerater as claimed in any of claims 1 to 3, which contains nonionic, anionic, amphoteric and/or cationic emulsifiers as stabilizer.

5. An antifoam and/or deaerater as claimed in any of claims 1 to 4, which contains from 0.1 to 3% by weight of a water-soluble, amphiphilic copolymer having acid groups and/or of a water-soluble salt thereof as a stabilizer.

6. An antifoam and/or deaerator as claimed in any of claims 1 to 4, which contains, as stabilizer B, from 0.1 to 3% by weight, based on the oil-in-water dispersions, of at least one

- polymer of monoethylenically unsaturated acids having molar masses of from 1500 to 300,000,
- graft polymer of from 5 to 40 parts by weight of N-vinylformamide per 100 parts by weight of a polyalkylene glycol having a molar mass of from 500 to 10,000,
- zwitterionic polyalkylene polyamine,
- zwitterionic polyethyleneimine,
- zwitterionic polyetherpolyamine or
- zwitterionic crosslinked polyalkylenepolyamine.

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7. An antifoam and/or deaerator as claimed in claim 6, which contains, as stabilizer (B), homopolymers of acrylic acid, homopolymers of methacrylic acid, copolymers of acrylic acid and methacrylic acid, copolymers of acrylic acid and maleic acid, copolymers of methacrylic acid and maleic acid, polyvinylsulfonic acid, polyacrylamido-2-methylpropane-sulfonic acid or their alkali metal and ammonium salts having molar masses of from 1500 to 300,000.
8. An antifoam and/or deaerator as claimed in any of claims 1 to 7, wherein the hydrophobic phase contains from 1 to 100% by weight of a 3-thiaalkan-1-ol, of a 3-thiaoxoalkan-1-ol, of a 3-thiadioxoalkan-1-ol, of esters of said compounds with C<sub>1</sub>- to C<sub>30</sub>-carboxylic acids or of mixtures thereof.
9. An antifoam and/or deaerator as claimed in any of claims 1 to 7, wherein the hydrophobic phase contains from 5 to 75% by weight of a 3-thia-C<sub>16</sub> to C<sub>30</sub>-alkan-1-ol, of a 3-thiaoxo-C<sub>16</sub> to C<sub>30</sub>-alkan-1-ol, of a 3-thiadioxo-C<sub>16</sub>- to C<sub>30</sub>-alkan-1-ol, of esters of said compounds with C<sub>1</sub>- to C<sub>30</sub>-carboxylic acids or of mixtures thereof.
10. An antifoam and/or deaerator as claimed in any of claims 1 to 9, wherein the hydrophobic phase contains from 5 to 70% by weight of a 3-thia-C<sub>18</sub>- to C<sub>28</sub>-alkan-1-ol.
11. The use of 3-thiaalkan-1-ols, 3-thiaoxoalkan-1-ols, 3-thiadioxoalkan-1-ols, esters of said compounds with C<sub>1</sub>- to C<sub>30</sub>-carboxylic acids or mixtures thereof as components having an antifoam and/or deaerating effect in antifoams and/or deaerators based on oil-in-water dispersions.
12. The use as claimed in claim 11, wherein the 3-thiaalkan-1-ols, 3-thiaoxoalkan-1-ols, 3-thiadioxoalkan-1-ols, esters of said compounds or mixtures thereof contained in the oil phase are stabilized with
- monoethylenically unsaturated acids having molar masses of from 1500 to 300,000,
  - graft polymers of from 5 to 40 parts by weight of N-vinylformamide per 100 parts by weight of a polyalkylene glycol having a molar mass of from 500 to 10,000,
  - zwitterionic polyalkylenepolyamines,
  - zwitterionic polyethyleneimines,
  - zwitterionic polyetherpolyamines or

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- zwitterionic crosslinked polyalkylenepolyamines.

13. The use as claimed in claim 12, wherein the stabilizers used are homopolymers of acrylic acid, homopolymers of methacrylic acid, copolymers of acrylic acid and methacrylic acid, copolymers of acrylic acid and maleic acid, copolymers of methacrylic acid and maleic acid, polyvinylsulfonic acid, polyacrylamido-2-methylpropanesulfonic acid or their alkali metal and ammonium salts having molar masses of 1500 to 300,000.
14. The use as claimed in any of claims 11-13, wherein the antifoam and/or deaerater are used for defoaming and/or deaerating the aqueous media in paper making, in pulp cooking, in pulp washing, in the beating of paper stock and in the dispersion of pigments for paper making.
15. The use as claimed in any of claims 11-13, wherein the antifoam and/or deaerater are used in the engine sizing and surface sizing of paper.
16. The use as claimed in any of claims 11-13, wherein the antifoam and/or deaerater are used in paper making, in aqueous systems whose temperature is above 40°C.